

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1-7. (Previously Canceled)

8. (Canceled)

9. (Currently amended) ~~The printed circuit board of Claim 8~~ A printed circuit board, comprising:

a first core;

a second core; and

an insulating material having regions of increased permittivity, the insulating material operable to couple the first core to the second core and the regions of increased permittivity disposed proximate to at least one power plane defined between the first core and the second core;

~~further comprising wherein~~ the insulating material ~~including~~ includes a fiberglass mesh foundation and an adhesive material disposed on respective sides of the foundation.

10. (Original) The printed circuit board of Claim 9, further comprising infusing the adhesive material with material having a higher permittivity than that of the adhesive material.

11. (Currently amended) ~~The printed circuit board of Claim 8~~ A printed circuit board, comprising:

a first core;

a second core; and

an insulating material having regions of increased permittivity, the insulating material operable to couple the first core to the second core and the regions of increased

permittivity disposed proximate to at least one power plane defined between the first core and the second core;

further comprising wherein the increased permittivity regions of the insulating material ~~defined by~~ **include** glass particles infused in the insulating material ~~and in substantial alignment with the power plane defined by the first and second cores.~~

12. **(Currently amended)** The printed circuit board of Claim **8 11**, further comprising:

a third core; and

an additional insulating material having regions of increased permittivity, the additional insulating material operable to couple the first core to the third core and the regions of increased permittivity disposed proximate at least one power plane defined by the first core and the second core.

13. **(Currently amended)** The printed circuit board of Claim **8 11**, further comprising:

at least two power planes defined between respective cores; and

at least two regions of increased permittivity disposed substantially within respective power planes, the two regions of increased permittivity having differing capacitance values.

14-15. **(Canceled)**

16. **(Currently amended)** The method of Claim **14 21**, further comprising ~~integrating glass particles into at least a portion of the dielectric layer~~**[,]** the dielectric layer including a fiberglass mesh having an adhesive layer disposed on respective first and second sides, the glass particles infused into the adhesive layer of at least a first side.

17. **(Currently amended)** The method of Claim **14 21**, further comprising coupling a third core proximate the first core with a dielectric layer**[,]** ~~the dielectric layer having glass particles disposed therein.~~

18. **(Currently amended)** The method of Claim ~~14~~ 21, further comprising reprocessing the dielectric layer to permit addition of an increased permittivity insulating material therein.

19. **(Currently amended)** The method of Claim ~~14~~ 21, further comprising maintaining portions of the dielectric layer substantially free from insulating material where such areas substantially align with signal pathways of a selected core.

20. **(Currently amended)** The method of Claim ~~14~~ 21, further comprising coupling a first and second panel together about the dielectric layer such that the insulating material integrated portions of the dielectric layer substantially align with a power delivery plane to be defined by at least a portion of the first and second panels.

21. **(New)** A method for manufacturing a printed circuit board having at least a first core and a second core, comprising:

integrating an insulating material having a first permittivity into at least a portion of a dielectric layer having a second permittivity;

coupling the first and second cores together about the dielectric layer such that the insulating material integrated portions of the dielectric layer substantially align with a power delivery plane defined by at least a portion of the first and second cores; and

integrating glass particles into at least a portion of the dielectric layer.

22. **(New)** The printed circuit board of Claim 11, wherein the increased permittivity regions are in substantial alignment with the power plane defined by the first and second cores.